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INFECTION CONTROL COMMITTEE

Roles and Responsibilities

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Infection Control Committee - Purpose

Prevent and Control Nosocomial Infections

- Minimize Patient Risk
- Minimize Employee Risk

Provide Leadership

- Not reduce individual responsibility

Standardize Procedures

- Consistent quality on all units

Infection Control Committee – Membership

Multi-disciplinary - Bring Together Expertise in Many Areas

Leaders - Highlight Importance – Give it Weight

Multi-Service – Broad-Based Spectrum of Clinical Services

Senior Administrator	Infection Control Practitioner
Director – Operating Theatre	Manager – Central Sterile Supply
Director - Nursing	Director – Infectious Diseases
Director - Pharmacy	Manager – Occupational Health
Director – Laboratory/Microbiology	Chief Engineer
Director – Environmental Services	Director – Emergency Medicine
Chair – Quality Improvement Committee	Director - Epidemiology
Ad Hoc Advisory – as needed	Ad Hoc Advisory – as needed

Infection Control – It Needs Funding

Program Budget -

- Bed Numbers
- Bed Occupancy
- Complexity of Medical and Surgical Procedures and Associated Technology
- Patient Acuity

Alternative Cost –

- In U.S. $42,000 average additional cost for an ICU Central Line infection

Infection Preventionist – Job Description

- "The Infection Preventionist is trained in hospital epidemiology principles and is responsible for the surveillance, analysis, interpretation and reporting of hospital acquired infections; educating employees about infection prevention; and the development of health system policies and procedures to insure rigorous infection control standards that meet JCAHO, OSHA, Centers for Medicaid/Medicare Services, Centers for Disease Control and Prevention (CDC) and other nationally organized agencies recommendations and requirements."

From: Duke University 6/01/2012

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Infection Control Committee - Key Activities

- Planning
- Monitoring
- Evaluating
- Updating
- Educating

Planning

Writing and Infection Control Plan

- What Infection Control issues is the hospital facing?
- How will the Infection Control team perform its functions?
- What are the Committee's Strategies and Priorities?

Infection Control Plan

1. Policies and Procedures requiring implementation or updating
2. Staff requiring Education and Training
3. Surveillance Activities to be carried out
4. Aspects of Hygiene to be Monitored
5. Timetables for Audits of infection control activities
6. How input will be provided on chemicals, sterilization equipment, new products and procedures
7. How input will be provided on new clinical and support services

Infection Control Manual

- Policies and Procedures
  - Updated at least every three years
- Clearly assigned Roles and Responsibilities
  - Communication (Patients and Staff)
  - Record-Keeping and Reporting
  - Surveillance
  - Education
  - Outbreak Management

Policies and Procedures (1)

- Hand hygiene
- Standard Precautions
- Transmission-based Precautions
- Management of patients with known or suspected TB
- Prevention and follow-up of needle-stick injury/blood/body-fluid exposure
- Re-use of single-use items
- Waste management
- Pre-employment screening
- Insertion and management of intravascular device
- Screening of patients

Policies and Procedures (2)

- Investigation of outbreaks
- Disinfectant and antiseptic policy
- Purchasing of equipment
- Prevention and management of infection in hospital staff
- Laundry practice
- Management of immuno-compromised patients
- Management of non-immune and colonised staff
- Management of urinary catheter systems
- Care of wounds and management of surgical drains
- Staff vaccination policy

Policies and Procedures (3)

- Pest Control
- Antimicrobial Usage
- Environmental Standards for Patient Care Areas
- Aseptic Techniques
- Bed Management

Monitoring - **Screening**

Testing to see if a person is Colonized or Infected

Patients

- Policies for screening patients
- Policies for isolating patients

Staff

- Pre-Employment Screening

Monitoring –Surveillance (1)

Collection, Collation, Analysis and Reporting of Data

- Events
- Rates

Designed to

- Monitor Patterns
- Prevent Outbreaks or Detect them Early
- Identify High Risk Groups
- Provide Information for Planning and Resource Allocation

Monitoring –Surveillance (2)

Possible Surveillance Activities

- Surgical Site Infections
- Bloodstream Infections
- Pneumonias
- Devise Related Infections
- Infections from Multi-Drug Resistant Organisms

Evaluating

Regular Review of all Infection Control Procedures throughout the Hospital

- Environmental Services - Cleaning Procedures
- Laboratory –Testing and Reporting of Notifiable Diseases
- Pharmacy – Antibiotic Policies Compliance
- Engineering – Environmental Controls
- Construction and Renovation – Containment Procedures
- Occupational Health – Employee Testing and Deployment,

Updating

Responsibility -Hospital's Current State of Knowledge

- New Technology impact on Infection Control
- New Bacterial Strains
- New Research Findings
- New WHO, Government of Albania Regulations

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Dashboard Report

2012 INFECTION CONTROL & PREVENTION PROGRAM DASHBOARD Indicator Variance Report			
Indicator	**Qtr**	**Explanation of Variance**	**Action for Improvement**
VENTILATOR ASSOCIATED PNEUMONIA INFECTION RATES (VAP)	1Q2012	No VAP identified in 1Q12 in ICU.	ICP will continue to monitor, track and trend VAP in critical care unit.
CENTRAL LINE ASSOCIATED BLOODSTREAM INFECTION RATES (CLABSI)	1Q2012	No CLABSI identified in 1Q12	There were no CLABSI reported in the 1Q12. ICP will continue to monitor, track and trend CLABSI.
CATHETER ASSOCIATED URINARY TRACT INFECTION RATES (CAUTI)	1Q2012	No CA UTI identified in 1Q12.	There were no CA UTI reported in 1Q12. ICP will continue to monitor, track and trend CA UTI.
MULTI-DRUG RESISTANT ORGANISMS RATES- MRSA, VRE	1Q2012	Rate of HAI MRSA for 1Q12 was 0.5. CA MRSA rate is 9.7. There were 4 HAI VRE and 6 CA VRE infections reported in 1Q12.	There were 39 CA MRSA and 9 HAI MRSA infections in the 1Q12. There were 6 CA VRE and 4 HAI VRE in the 1Q12. All the MDROs and any trends associated will be reported as needed.
HEALTHCARE ASSOCIATED INFECTION RATES-C-DIFF	1Q2012	HAI CDI rate for 1Q12 was 3.0 and CA CDI rate was 5.4.	In 1Q12, there were 5 HA CDI identified and 9 CA CDI. ICP will continue to monitor, track and trend CDI.On April 3rd, Infection Control and Prevention Committee approved "Elimination of HA CDI" program. This program will focus on management of CDI patients with implementation of tier II infection prevention measures, strict contact precaution, education for clinical staff and EVS, probiotics and antibiotics management. Implementation will start on July 1st.
SSI RATES- TOTAL JOINT PROCEDURES (KNEE AND HIPS)	1Q2012	There were 3 SSI THA related in 1Q12. No SSI TKA was reported.	THA SSI Rate was 3.9, above the targeted goal of 1.26. SSI cases were reviewed with Chief of surgery and Orthopedic program Coordinator. SSI Focused group - Prosthetic Related Infections: Monitoring and Elimination (PRIME), was formed to address deficiencies that were identified. [redacted] Insitute is collaborating with PRIME to improve the outcome and reduce SSI rate for orthopedic procedures. In February 2012, [redacted] also joined the JOINTS project, an Institute for Healthcare Improvement (IHI) Collaborative focused on implementing three new surgical infection prevention bundle elements.
SSI - LAMINECTOMY SPINAL FUSIONS	1Q2012	There were 0 SSI Laminectomy related and 0 SSI Fusion related in 1Q12.	There were no SSI related to spinal procedures in 1Q12. ICP will continue to monitor, track and trend targeted SSI.

Educating

ALL Staff Receive General Infection Control Training

- Annual Program
- Essential part of New Employee Orientation
- Topics: Hand-washing, Prevention of Exposure to Blood and Body Fluids, Patient Isolation Procedures, etc.

- Departments Supplement w/ Unit-Specific Education
- Committee audits compliance of training requirements and effectiveness

Environmental Infection Control

2003 – Centers for Disease Control and Prevention – Guidelines for Environmental Infection Control
www.cdc.gov/ncidod/hip/enviro/guide.htm

Goal - Strategies for the prevention of environmentally-mediated infections

Focus Population – Immuno-compromised Patients

Recommendations Cover: Air, Water, Environmental Services, Environmental Sampling, Laundry and Bedding, Animals in Healthcare Facilities, Regulated Medical Waste

Performance Measures (CDC Guidelines)

1. Infection-control personnel are actively involved in all phases of a health-care facility's demolition, construction, and renovation. Activities should include performing a risk assessment of the necessary types of construction barriers, and daily monitoring and documenting of the presence of negative airflow within the construction zone area.

2. Monitor and document daily the negative airflow in airborne infection isolation (AII) rooms and positive airflow in protective environment (PE) rooms.

3. Perform assays at least once a month by using standard quantitative methods for endotoxin in water used to reprocess hemodialyzers, and for heterotrophic and mesophilic bacteria in water used to prepare dialysate and for hemodialyzer reprocessing.

4. Evaluate possible environmental sources (e.g., water, laboratory solutions, or reagents) of specimen contamination when nontuberculous mycobacteria (NTM) of unlikely clinical importance are isolated from clinical cultures. If environmental contamination is found, eliminate the probable mechanisms.

5. Document policies to identify and respond to water damage. Such policies should result in either repair and drying of wet structural or porous materials within 72 hours, or removal of the wet material if drying is unlikely with 72 hours.

Ventilation Hazards – Airborne Disease

- ✓ Water-damaged building materials
- ✓ Filter By-Passes
- ✓ Improper Fan Settings
- ✓ Ductwork Disconnections
- ✓ Air-Flow Impedance
- ✓ Open Windows
- ✓ Dirty Window Air-Conditioners
- ✓ Inadequate Filtration
- ✓ Maintenance Disruptions
- ✓ Excessive Moisture in the HVAC System
- ✓ Duct Contamination

Water Hazards – Waterborne Disease

- ✓ City Water Supply
- ✓ Cooling Towers / Evaporative Condensers (aerosol exposure)
- ✓ Dialysis Water
- ✓ Ice Machines
- ✓ Hydrotherapy Tanks
- ✓ Medical/Dental Equipment Connected to Main Water Supply

Methicillin-Resistant Staphylococcus Aureus (MRSA)

Epidemiology

- Once acquired, MRSA colonization can be long-lasting --months or years. A patient acquiring MRSA colonization during a hospital stay has increased risk for MRSA infections following discharge, or during subsequent admissions
- MRSA carriers also serve as reservoirs for further transmission as they move through and across healthcare facilities
- Healthcare facilities that share patients are interdependent upon one another with regard to their MRSA experience. The quality of MRSA control in one facility may influence the MRSA experience in others
- There may be advantages to coordinated multicenter control programs involving facilities that share patients with one another

http://www.cdc.gov/hai/pdfs/toolkits/MRSA_toolkit_white_020910_v2.pdf

MRSA – Core Prevention Strategies

- Assessing hand hygiene practices
- Implementing Contact Precautions
- Recognizing previously colonized patients
- Rapidly reporting MRSA lab results
- Providing MRSA education for healthcare providers

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Resources:

Information for this presentation was obtained from:

"Hospital Acquired Infection: Report of the Controller and Auditor-General of New Zealand" June 2003 ISBN #0-468-18105-1

"Australian Guidelines for the Prevention and Control of Infection in Healthcare" – National Health and Medical Research Council, Commonwealth of Australia 2010 ISBN #1864965282 www.nhmrc.gov.au

Centers for Disease Control and Prevention – Guidelines for Environmental Infection Control - 2003 www.cdc.gov/ncidod/hip/enviro/guide.htm

Methicillin-Resistent Staphylococcus Aureus (MRSA) Infection – Jernigan & Kallen Jan 2010 www.cdc.gov/hai/pdfs/toolkits/MRSA_toolkit_white_020910_v2.pdf